

IN THE CLAIMS

Please replace claims 1, 11, 14, 16, 18 and 20 with amended claims 1, 11, 14, 16, 18 and 20 as follows:

1. (Twice Amended) A printing system receiving input data for printing images on a print media, comprising:

an inkjet printhead having a body and ink ejection devices located on a substrate;

a temperature sensor that senses the temperature of the inkjet printhead;

and

a controller that uses the sensed temperature to control temperature variations of the printhead to be within a predefined range from a starting point of a print swath to an end point of the print swath and successive print swaths of pigmented ink;

a bubble reduction device coupled to the controller that minimizes air bubble growth rates and bubble size within the printhead to enable expulsion of the air bubbles from the printhead without clogging.

11. (Twice Amended) A method for printing images with an inkjet printhead on a print media from a printing system having heating elements located on a substrate, the method comprising:

receiving a temperature of the substrate before printing begins;

comparing the temperature with a set point for printing;

initiating the heating elements if the temperature is below a predetermined printing threshold;

turning off the heating elements when the threshold temperature of the substrate has been reached;

controlling temperature variations of the printhead to be within a predefined range from a starting point of a print swath to an end point of the print swath and successive print swaths of pigmented ink; and

Cond *Sub* *Sub D*
minimizing air bubble growth rates and bubble sizes within the printhead to enable expulsion of the air bubbles from the printhead without clogging when pigmented ink is used and the temperature variations are controlled.

Sub D
14. (Twice Amended) A large array inkjet printing apparatus that prints pigmented ink, comprising:

a monolithic substrate defining a printhead;
a large array of ink ejection elements formed on the substrate;
a nozzle member coupled to the substrate and a controller that controls temperature variations of the printhead to be within a predefined range from a starting point of a print swath to an end point of the print swath and successive print swaths of pigmented ink; and
a bubble reduction device coupled to the controller that minimizes air bubble growth rates and bubble size within the printhead to enable expulsion of the air bubbles from the printhead without clogging.

Sub D
16. (Twice Amended) The large array inkjet printing apparatus of claim 14, wherein the controller controls an increase in the mean temperature of the substrate through a feedback loop.

Sub D
18. (Once Amended) The large array inkjet printing apparatus of claim 14, further comprising a programmable feedback loop that increases a baseline temperature of the substrate before printing the pigmented ink.

Sub D
20. (Twice Amended) The large array inkjet printing apparatus of claim 14, wherein the controller controls temperatures of specific sections of the substrate and a baseline temperature of ink ejection nozzles of the nozzle member associated with the respective sections.